



# UNITED STATES PATENT AND TRADEMARK OFFICE

m.s

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,560	09/05/2003	Alexander Talalai	SPIRP002	7867
25920	7590	09/13/2006		EXAMINER
				TIEU, BINH KIEN
			ART UNIT	PAPER NUMBER
				2614

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/656,560	TALALAI, ALEXANDER	
	Examiner BINH K. TIEU	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 September 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. There was no claim 15. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 16-20 have been renumbered 15-19.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-5, 14-15 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Coleman (US. Pat. #: 5,933,475).

***Regarding claim 1***, Coleman teaches a method for testing a quality of communication data received from a system under test (SUT), comprising the operation of:

storing a reference test data comprising a plurality of data segments (col.5, lines 10-25);  
receiving degraded test data from the SUT, the received degraded test data comprising a plurality of data segments (i.e., timing of audio signals, col.5, lines 25-30)

locating the data segments in the degraded test data to related data segments in the reference test data (col.5, line 30 through col.6, line 5);

corresponding data segments in the degraded test data to related data segments in the reference test data (col.6, lines 6-21); and

comparing the data segments in the degraded test data to corresponding data segments in the reference test data using a fixed point operation (col.6, lines 23-34).

Regarding claim 2, note col.6, lines 43-54.

Regarding claim 4, note col.6, lines 23-42.

Regarding claim 5, note col.5, lines 38-54.

***Regarding claim 14,*** Coleman teaches a computer program embodied on a computer readable medium for testing a quality of communication data received from a system under test (SUT), comprising the operation of:

program instructions that store reference test data comprising a plurality of data segments (col.5, lines 10-25);

program instructions that receive degraded test data from the SUT, the received degraded test data comprising a plurality of data segments (i.e., timing of audio signals, col.5, lines 25-30)

program instructions that locate the data segments in the degraded test data to related data segments in the reference test data (col.5, line 30 through col.6, line 5);

program instructions that correspond data segments in the degraded test data to related data segments in the reference test data (col.6, lines 6-21); and

program instructions that compare the data segments in the degraded test data to corresponding data segments in the reference test data using a fixed point operation (col.6, lines 23-34).

Regarding **renumbered** claim 15, note col.6, lines 43-54.

Regarding **renumbered** claim 17, note col.6, lines 23-42.

Regarding **renumbered** claim 18, note col.5, lines 38-54.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman (US. Pat. #: 5,933,475) in view of Cabot (US. Pat. #: 5,649,304).

Regarding claim 3 and **renumbered** claim 16, Coleman teaches all subject matters as claimed above, except for the well-known Fourier Transform technique for separating the waveform into sinusoids of different frequency. However, Cabot teaches such well-known Fast Fourier Transform (FFT) in col.5, line 61 through col.6, line 22 for a purpose of analyzing the test signal measurements.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of the well-known Fourier Transform technique for separating the waveform into sinusoids of different frequency, Cabot into view of

Art Unit: 2614

Coleman in order to analyze the measurements of the speech signal generated by a device under test.

6. Claims 6-10, 12-13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman (US. Pat. #: 5,933,475) in view of Quan et al. (Pub. No.: US 2004/0193974).

Regarding claims 6-7 and *renumbered* claim 19, Coleman teaches all subject matters as claimed above, except for the Perceptual evaluation signal quality (PESQ) result and quality of service (QoC) data files. However, Quan et al. (Quan) teaches such features paragraphs [0029] and [0040] for a purpose of testing the capability of a packet-switched network for handling the unique requirements of voice transmission.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of the Perceptual evaluation signal quality (PESQ) result and quality of service (QoC) data files, as taught by Quan, into view of Coleman in order to test telecommunications equipment for sound quality.

Regarding claim 8, Coleman teaches all subject matters as claimed above, except for an encoder for encoding the reference test data; and a decoder for decoding the degraded test data. However, Quan teaches such features in figures 2 and 4, paragraphs [0019]-[0027] and [0033]-[0039] for a purpose of testing voice transmission and voice quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of the encoder for encoding the reference test data; and the decoder for decoding the degraded test data, as taught by Quan, into view of Coleman in order to test the voice quality on the voice transmission line or channel.

Regarding claim 9, Coleman further teaches limitations of the claim in col.6, 23-34.

Regarding claim 10, Coleman further teaches limitations of the claim in col.7, lines 1-32.

Regarding claim 12, note col.6, lines 23-42.

Regarding claim 13, note col.5, lines 38-54.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman (US. Pat. #: 5,933,475) in view of Quan et al. (Pub. No.: US 2004/0193974) and further in view of Cabot (US. Pat. #: 5,649,304).

Regarding claim 3, Coleman and Quan, in combination, teaches all subject matters as claimed above, except for the well-known Fourier Transform technique for separating the waveform into sinusoids of different frequency. However, Cabot teaches such well-known Fast Fourier Transform (FFT) in col.5, line 61 through col.6, line 22 for a purpose of analyzing the test signal measurements.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of the well-known Fourier Transform technique for separating the waveform into sinusoids of different frequency, Cabot into view of Coleman and Quan in order to analyze the measurements of the speech signal generated by a device under test.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: [BINH.TIEU@USPTO.GOV](mailto:BINH.TIEU@USPTO.GOV).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN**

**MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

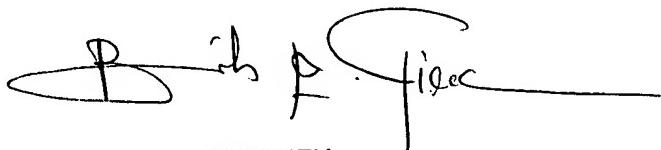
Or faxed to:

(571) 273-8300

Hand Carry Deliveries to:

Customer Service Window  
(Randolph Building)  
401 Dulany Street  
Alexandria, VA 22314

In formation regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BINH TIEU  
PRIMARY EXAMINER

Technology Division 2614

Date: September 2006